MAG Bicycles Count Project

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Acceptance of Final Report

- Overview of MAG Bicycles Count final report for formal committee acceptance
- Next steps: acceptance by TRC, Management Committee, and Regional Council

Project Need

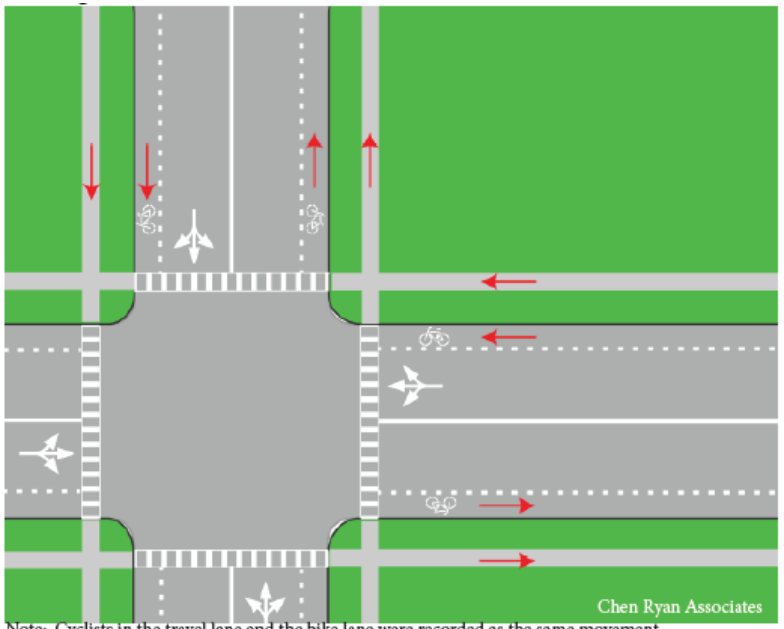
- Why count bikes?
  - Lack of existing data on bicycling
  - More data analysis for grant applications
  - Need for data to evaluate air quality benefits

Project Background

- 18-month study with ChenRyan Associates
  - February 2013-July 2014
  - Determine ideal methodology and comprehensive network of count stations
  - Perform data collection
  - Analyze data
  - Lay foundation for future data collection

Manual Counts

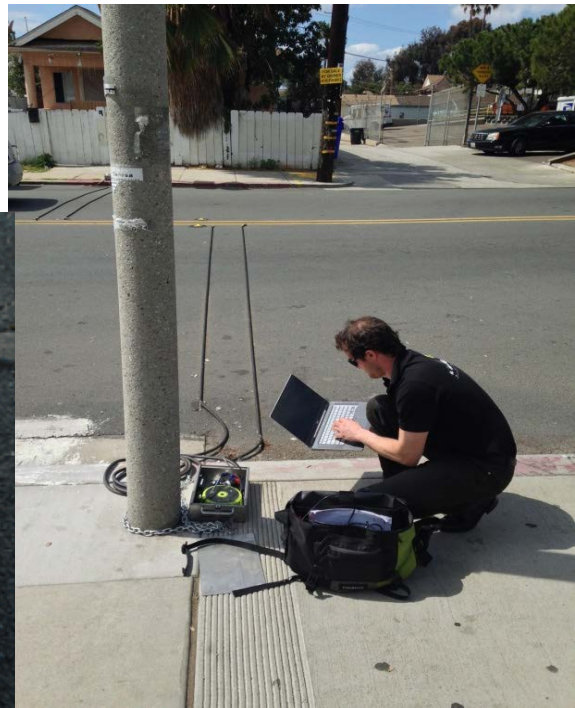
- 84 locations (56 weekday, 28 weekend)
- Counts were done over 2-hour peak period
  - Noted whether cyclist is on sidewalk or in street
  - Noted wrong-way riding



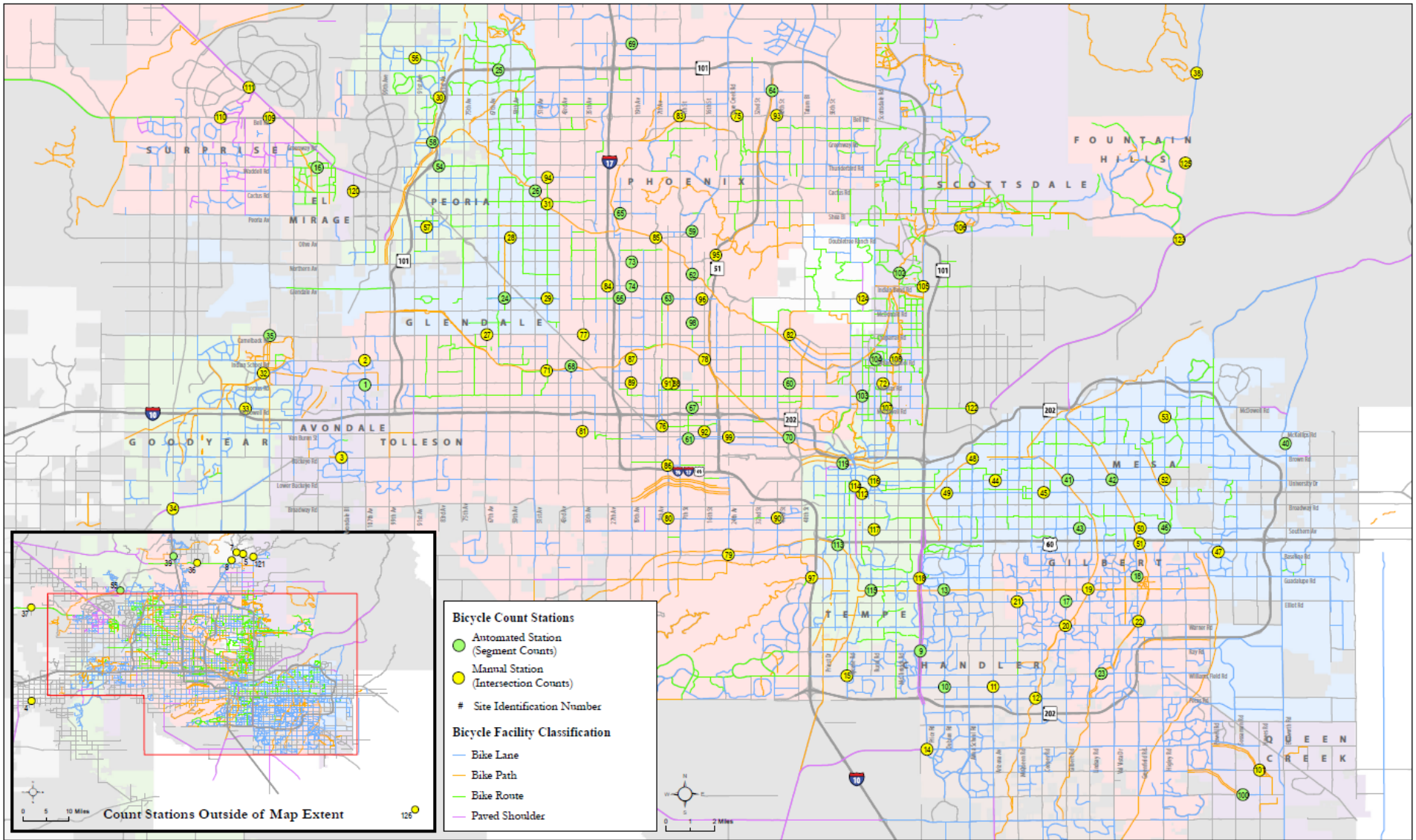
Note: Cyclists in the travel lane and the bike lane were recorded as the same movement

Automated Counts

- 44 locations
- 24-hour continuous counts over two week periods (October-November 2014)
  - Pneumatic Tubes laid in street, bike lane, or path



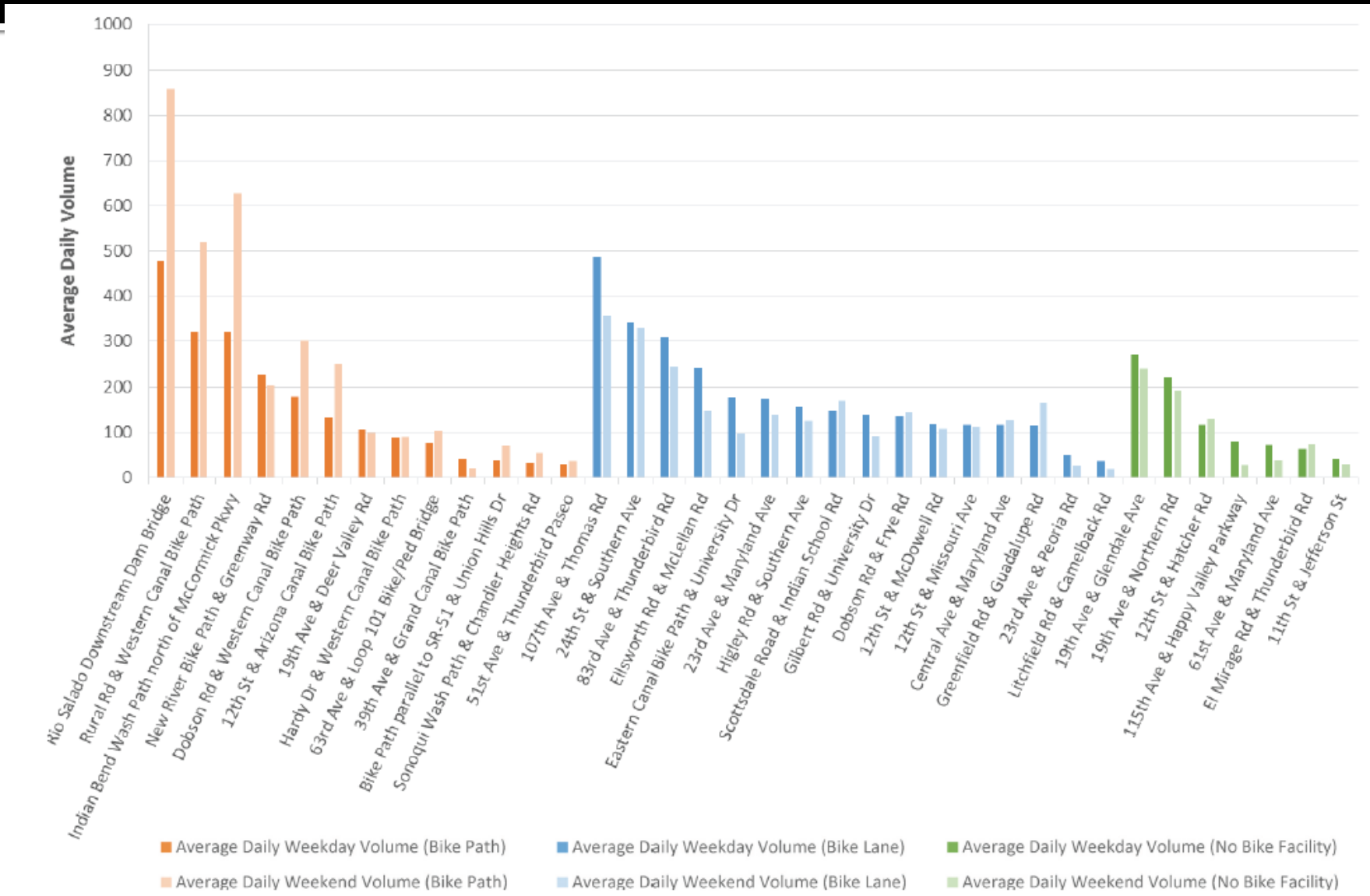
Study Sites


SURPRISE
EL MIRAGE
PEORIA
PHOENIX
SCOTTSDALE
FOUNTAIN HILLS
GLENDALE
GOODYEAR
AVONDALE
TOLLESON
MESA
GILBERT
TEMPE
CHANDLER
QUEEN CREEK
Bicycle Count Stations
Automated Station (Segment Counts)
Manual Station (Intersection Counts)
Site Identification Number
Bicycle Facility Classification
Bike Lane
Bike Path
Bike Route
Paved Shoulder
Count Stations Outside of Map Extent

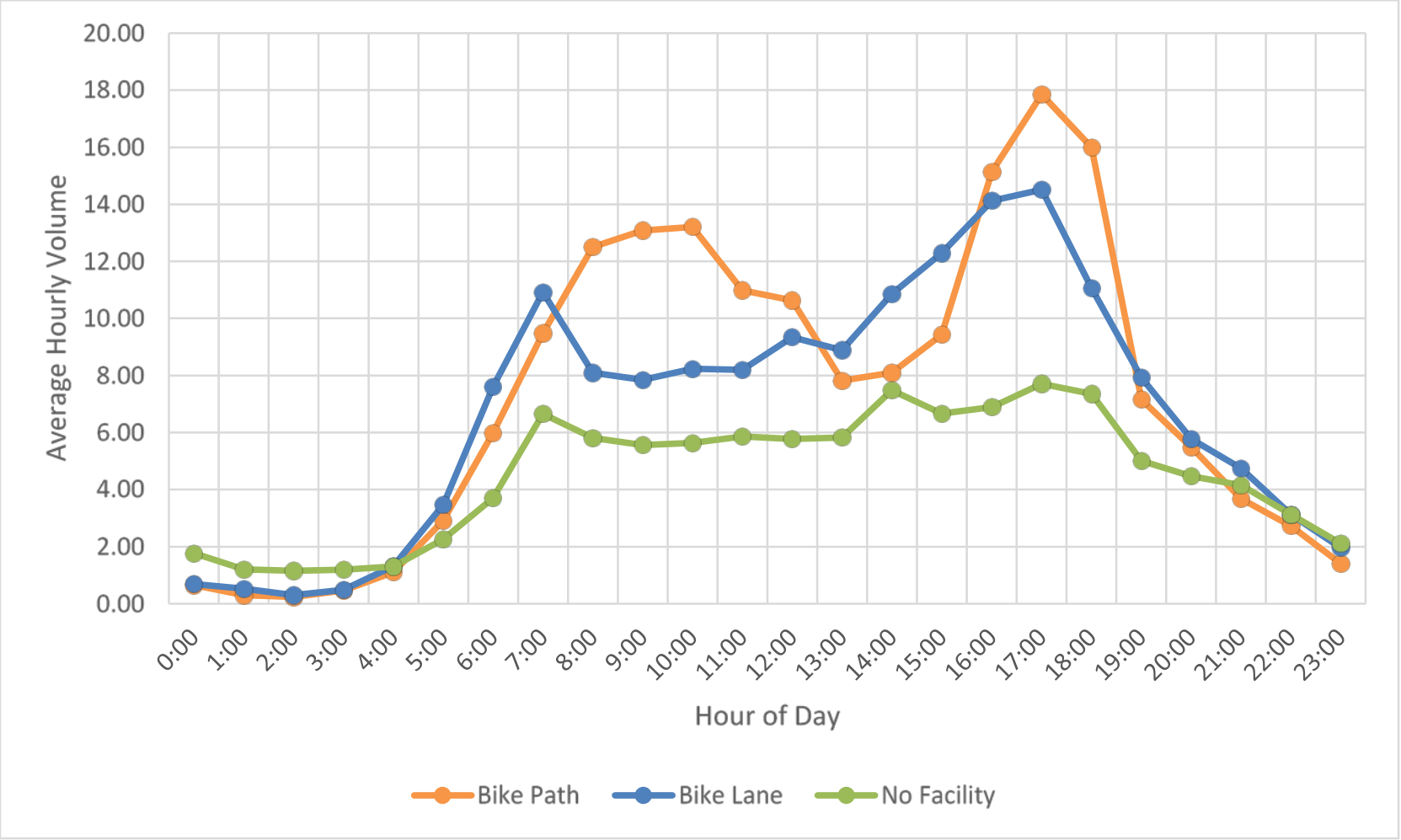
Findings

- Generally, bike paths experienced greater average hourly volumes during weekdays and weekends than bike lanes or roadways without bikeways.
- Between 30% and 94% of cyclists in MAG region ride on the sidewalk
  - Varied based on presence or lack of bikeway, number of lanes, and presence or lack of right-turn lane

Average Daily Bicycle Volumes

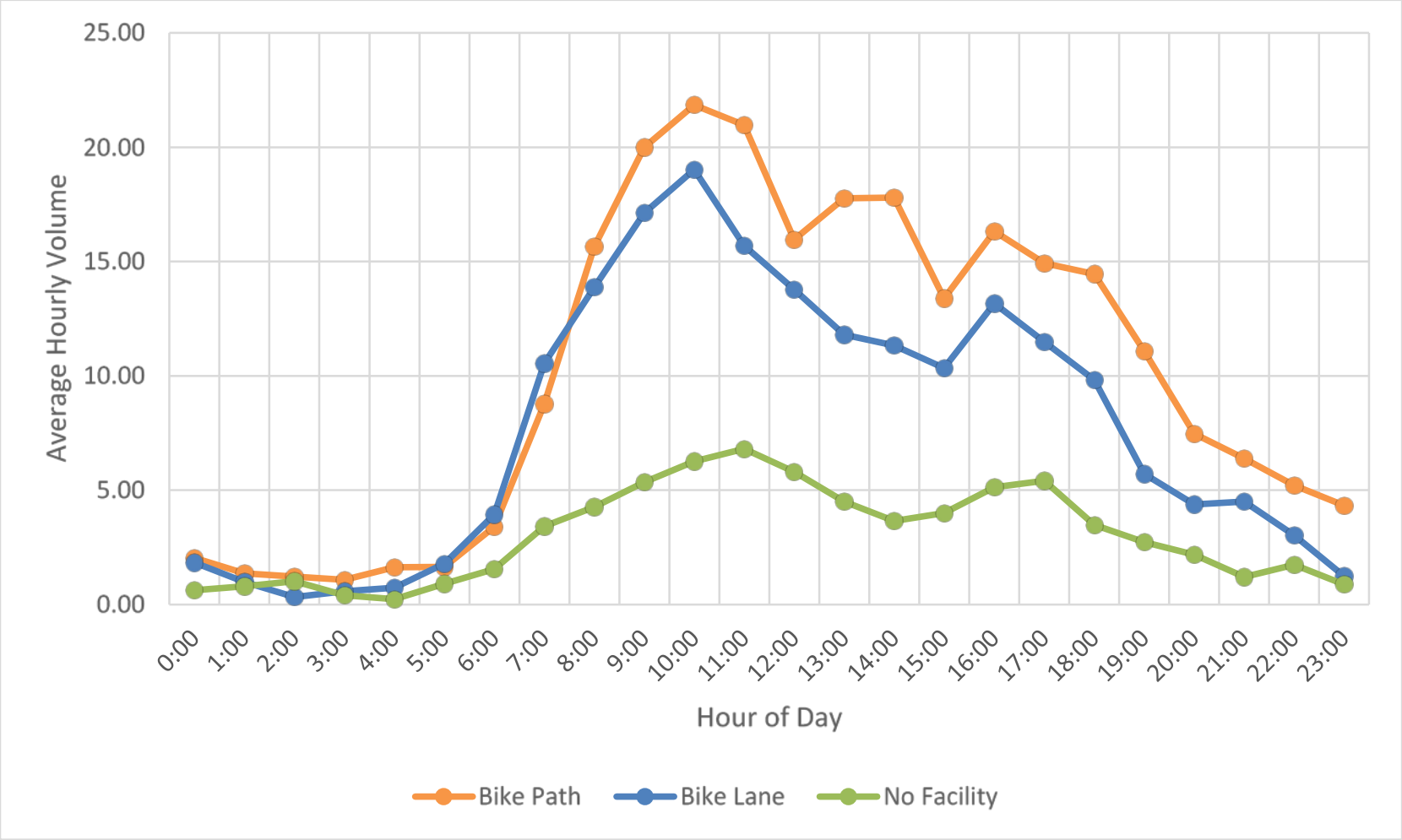


Average Hourly Weekday Volumes



MAG Region, average of 37 automated count stations, October-November 2014

Average Hourly Weekend Volumes



MAG Region, average of 37 automated count stations, October-November 2014

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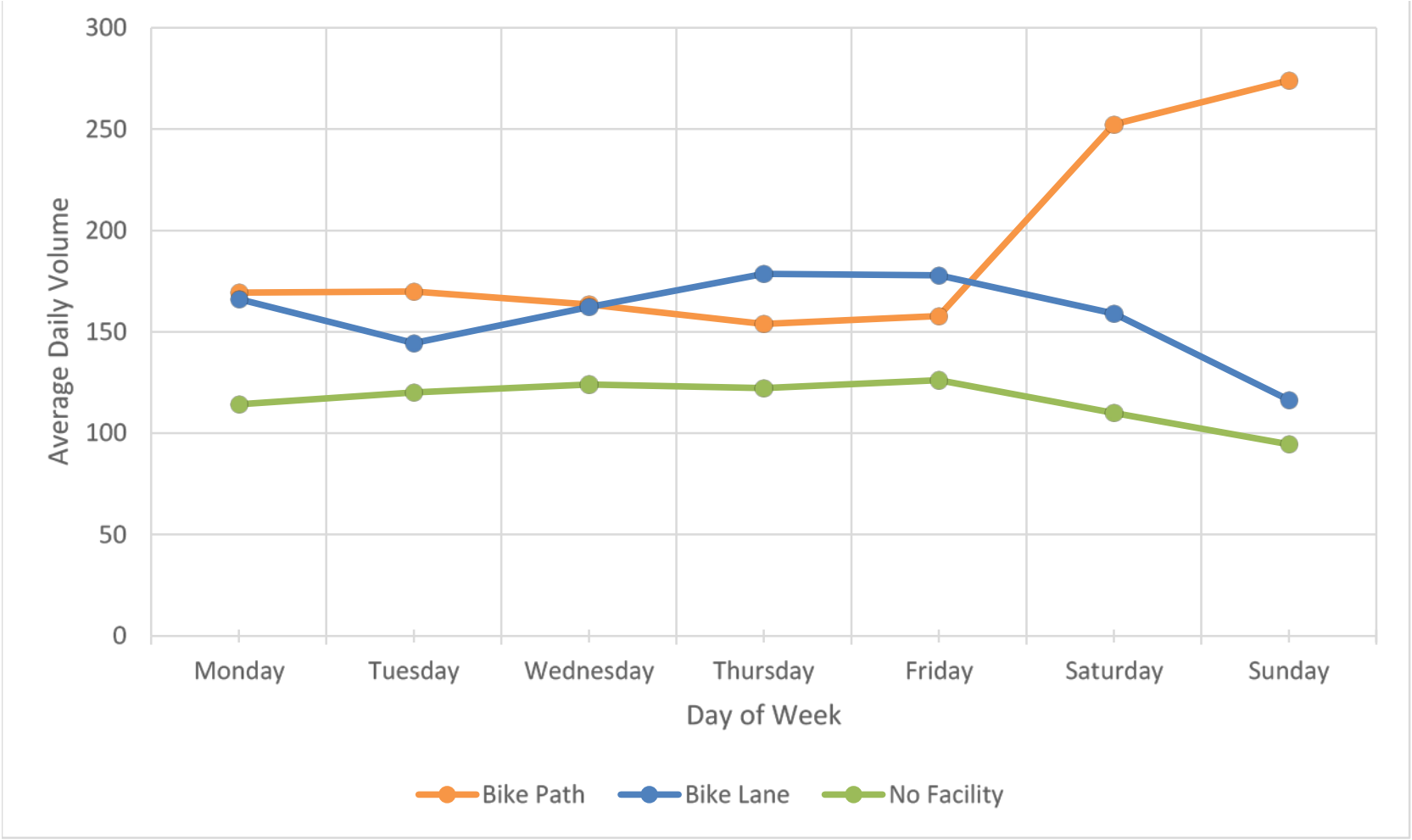


Data Uses

- Data can help us evaluate:
  - Bicycling trends in the region over time
  - Variation in volumes by bikeway type
  - Levels of sidewalk and wrong-way riding
  - Cycling-related emissions reductions and health benefits

Data Uses

- The data can be used:
  - To enhance transportation safety studies and transportation planning process
  - To perform before-and-after studies when new bikeways are built
  - In the evaluation of project applications

Future Data Collection

- Continue automated counts for 2014 and 2015
  - At the same 44 locations counted in 2013
  - Then assess whether region-wide automated counts should be conducted annually or bi-annually
- Work with MAG member agencies to continue manual counts as a supplement to automated counts
  - Example: T.B.A.G. volunteers conduct annual manual counts in City of Tempe

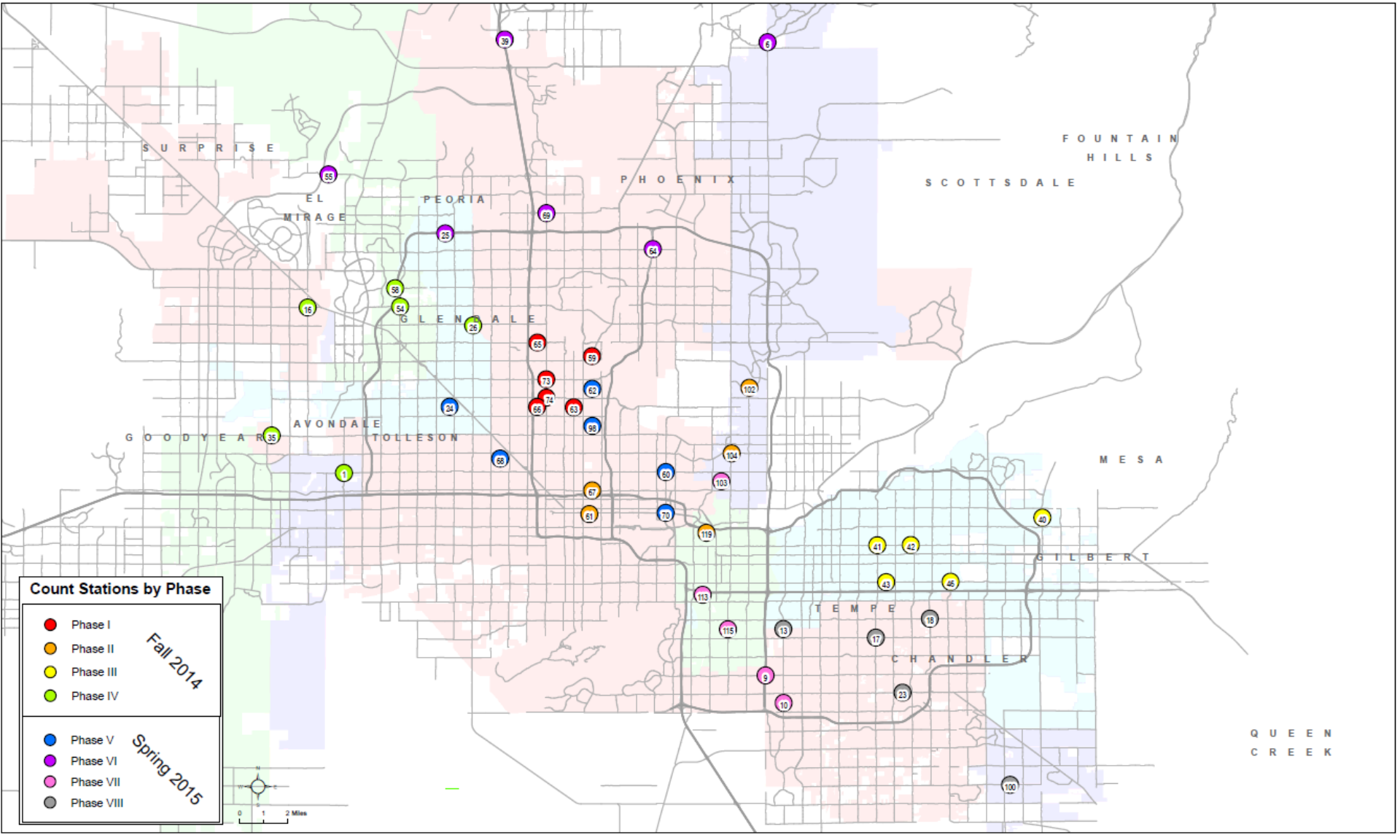
Future Data Collection

- Loan automated counters (owned by MAG) to member agencies
- Encourage MAG member agencies to install permanent bike counters
  - Example: Consolidated Canal in City of Mesa

Action Requested

- Recommend acceptance of MAG Bicycles Count project final report.

MAG Bicycles Count Phase II

- Two handouts included in agenda packet
  - Map of automated count stations by phase
  - List of automated count stations by phase
- Half of sites in Fall 2014, half in Spring 2015
- Counts will tentatively start September 29, 2014

MAG Bicycles Count Phase II